APPENDIX L: ReMAP Prioritization Criteria and Justification

The ReMAP committee incorporated all the OBPR Research Merit Criteria into their prioritization process, but went a level further in deciding the final priorities. Any research that did not have the above components did not make it to highest priority in the first screening. Additional justifications determined by ReMAP for arriving at the Task Force priorities included:

1. For first priority:
   - The research is essential to enable future space exploration.
   - The research could reveal fundamental laws of nature.
   - The research is targeted toward systems with a known direct response to gravity.
   - The research is hypothesis based.
   - The research requires microgravity, human intervention, and long-term access to space.
   - If pertaining to countermeasure development, it is mechanism based.
   - There is potential for substantial increase in capability, efficiency or cost effectiveness as a result of this research.
   - The project enables the development of a new generation of research scholars by training graduate and postdoctoral students.
   - There is a high probability of developing technology and applications that will be useful on earth and in space.
   - There is an effective research community for quality ground- and flight-based research.

2. For second priority:
   - The research effectively utilizes the unique capabilities of the ISS.
   - The research lowers flight risks, improves training and enhances performance of astronauts and equipment.
   - The research provides better understanding of critical areas in which we already have reliable theories and/or data.
   - The research tests whether the system has a direct response to gravity, or requires access to microgravity to be continued.

3. For third and fourth priorities:
   - There has been negative or unclear past experience with this type of space research so that the basic hypothesis now appears questionable.
   - NASA is not the appropriate funding agency – it is not in NASA's mission.
   - NASA can draw heavily or entirely on other agency's research. Others are better able to do the research.
   - The requirement for space-based research in microgravity or for ISS is not evident.